

SJ-01-0032 Revised 0305.ST25 SEQUENCE LISTING

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St. Jude Children's Research Hospital
       St. Jude Children's Research Hospital
       Curran, Thomas
       Keshvara, Lakhu
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      Cyclin Dependent Kinase 5 Phosphorylation of Disabled 1 Protein
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       10/078,927
       2002-02-19
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       PatentIn version 3.2
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       smallest carboxy terminal Dab1 tryptic fragment containing a Cdk5
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       phosphorylation site
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       (3)..(3)
       Serine at residue #3 equates to Serine491 in mouse Dab1 sequence
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       Cdk5 phosphorylation of Serine requires a Proline (P) in the +1
       position and a Lysine (K) in the +3 position
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Gln Ser Ser Pro Ser Lys
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       Dab1 tryptic fragment containing a Cdk5 phosphorylation site
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       Serine at Reisdue 21 equates to Serine515 in mouse Dab1 sequence
       Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position
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Ser Ser Ala Ser His Val Ser Asp Pro Thr Ala Asp Asp Ile Phe Glu 10 15

Glu Gly Phe Glu Ser Pro Ser Lys 20

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<222> (8)..(8)

<223> PHOSPHORYLATION, equates to Serine491 in mouse Dab1 sequence
Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position

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Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser Ala 10

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Lys Asp Ser Arg Lys Lys Gly Gln Asp Arg Ser Glu Ala Thr Leu Ile 20 25 30

Lys Arg Phe Lys Gly Glu Gly Val Arg Tyr Lys Ala Lys Leu Ile Gly 35 45

Ile Asp Glu Val Ser Ala Ala Arg Gly Asp Lys Leu Cys Gln Asp Ser 50 60

Met Met Lys Leu Lys Gly Val Val Ala Gly Ala Arg Ser Lys Gly Glu 65 70 75 80

His Lys Gln Lys Ile Phe Leu Thr Ile Ser Phe Gly Gly Ile Lys Ile Page 2

Phe Asp Glu Lys Thr Gly Ala Leu Gln His His His Ala Val His Glu 100 Ile Ser Tyr Ile Ala Lys Asp Ile Thr Asp His Arg Ala Phe Gly Tyr Val Cys Gly Lys Glu Gly Asn His Arg Phe Val Ala Ile Lys Thr Ala Gln Ala Ala Glu Pro Val Ile Leu Asp Leu Arg Asp Leu Phe Gln Leu Ile Tyr Glu Leu Lys Gln Arg Glu Glu Leu Glu Lys Lys Ala Gln Lys Asp Lys Gln Cys Glu Gln Ala Val Tyr Gln Thr Ile Leu Glu Glu Asp 180 Val Glu Asp Pro Val Tyr Gln Tyr Ile Val Phe Glu Ala Gly His Glu 200 Pro Ile Arg Asp Pro Glu Thr Glu Glu Asn Ile Tyr Gln Val Pro Thr Ser Gln Lys Lys Glu Gly Val Tyr Asp Val Pro Lys Ser Gln Pro Val 225 230 Ser Ala Val Thr Gln Leu Glu Leu Phe Gly Asp Met Ser Thr Pro Pro 245 Asp Ile Thr Ser Pro Pro Thr Pro Ala Thr Pro Gly Asp Ala Phe Leu 260 265 Pro Ser Ser Gln Thr Leu Pro Gly Ser Ala Asp Val Phe Gly Ser 280 Met Ser Phe Gly Thr Ala Ala Val Pro Ser Gly Tyr Val Ala Met Gly 290 295 300 Ala Val Leu Pro Ser Phe Trp Gly Gln Gln Pro Leu Val Gln Gln 305 310 320

Ile Ala Met Gly Ala Gln Pro Pro Val Ala Gln Val Ile Pro

330

SJ-01-0032 Revised 0305.ST25 Gln Pro Ile Ala Trp Gly Gln Pro Gly Leu Phe Pro Ala Thr Gln Gln 340 Ala Trp Pro Thr Val Ala Gly Gln Phe Pro Pro Ala Ala Phe Met Pro Thr Gln Thr Val Met Pro Leu Ala Ala Ala Met Phe Gln Gly Pro Leu Thr Pro Leu Ala Thr Val Pro Gly Thr Asn Asp Ser Ala Arg Ser Ser 390 395 400 Pro Gln Ser Asp Lys Pro Arg Gln Lys Met Gly Lys Glu Ser Phe Lys 405 Asp Phe Gln Met Val Gln Pro Pro Pro Val Pro Ser Arg Lys Pro Asp Gln Pro Ser Leu Thr Cys Thr Ser Glu Ala Phe Ser Ser Tyr Phe Asn Lys Val Gly Val Ala Gln Asp Thr Asp Asp Cys Asp Asp Phe Asp Ile Ser Gln Leu Asn Leu Thr Pro Val Thr Ser Thr Thr Pro Ser Thr Asn 465 470 475 480 Ser Pro Pro Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser Ala Ser His Val Ser Asp Pro Thr Ala Asp Asp Ile Phe Glu Glu Gly Phe Glu Ser Pro Ser Lys Ser Glu Glu Glu Glu Ala Pro Asp Gly Ser 515 520 Gln Ala Ser Ser Thr Ser Asp Pro Phe Gly Glu Pro Ser Gly Glu Pro 530 535 Ser Gly Asp Asn Ile Ser Pro Gln Asp Gly Ser 545 550